

Floodplain and lake deposits. Interbedded gray to black silty clay with occasional thin lenses of peat; little and lacustrine deposits up to 7 m (23 ft) thick. Fluvial or soil development (entirely absent).

Alluvial bajada deposits. Thin sheet-like intervals of fine- to medium-grained clayey sand and intercalated muddy, medium pebble gravel; deposits of low gradient streams that reworked older alluvial fans and alluvial fan deposits; weakly weathered and locally undisturbed. Little or no soil development (entirely absent).

Alluvial fan of Windy Hill. Locally derived silt to muddy, medium pebble gravel transported from the Windy Peak area; contains abundant, well-sorted remnants of Donner Lake Outwash. These fan deposits intertongue with and become part of the alluvial fan of Qa. Qa is a large, fan-shaped, but contains scattered remnants of older alluvium.

Sand, undifferentiated. Local deposits of fine to medium sand; siltan, alluvial outwash, and colluvial deposits.

Tahoe Outwash—Mount Rose Fan Complex. Glacial outwash stream deposits of volcanic and granitic clasts of all sizes; light gray to tan, silty, clay to clay large cobble to boulder gravel containing characteristically fresh granitic lag gravel. Strongly developed 1-m (3 ft) thick soil profile; dark yellowish-brown, prismatic argillic B-horizon; typically no siliceous or calcic duripan development; granitic boulders partly or thoroughly decomposed where buried. Deposits mostly on steep, thin veneers; some undifferentiated areas.

Older alluvium. Highly dissected remnants of mud- to sand-sized pebbles and gravel transported from Thomas Creek; silt profile 1-2 m (3-6 ft) thick with strongly developed argillic B-horizon. Deposits include areas of older alluvium in Steamboat Hills area.

Qa Sidestream deposits. Fluvial silt and medium sand associated with Tahoe Outwash; deposited in the Truckee River; silt profile similar to Qtm.

Qmb Mud-volcanic breccia. Heterogeneous mixture of mud- and low-strength volcanic breccia and silty volcanic rocks opaline and chalcedonic sinter, and deintergrated granitic clasts.

Qmc Lava and tephra. Muddy outwash forming strath terraces on bedrock; extensive matrix thickening eastward; unconsolidated small cobble gravel and interbedded coarse to very highly rounded clasts; uncally cemented very large deep weathered boulders of basalt and quartz monzonite more than 2 m (6 ft) in diameter. Strongly developed soil profile with 1-2 m (6-10 ft) thick silty clay to silty clay loam, weakly to strongly developed siliceous and calcic duripa 1-2 m (3-6 ft) thick; granitic clasts are highly deintergrated.

Qdm Donner Lake Outwash—Mount Rose Fan Complex. Pediment and thin fan deposits from major streams draining alpine glaciers on Mount Rose; silt to boulders; silty, clay to clay large, well-sorted large pebble gravel; cobbles and small boulders common. Clasts dominantly volcanic (porphyritic andesite and basalt) and granitic. Rare. Deeply weathered, strongly developed soil profile similar to Qd; locally overlain by undifferentiated veneer of Qtm cemented and/or hydrothermally altered in Steamboat Hills area.

Qe Pediment gravel. Veneers of moderately to poorly sorted medium pebble to cobble gravel <3 m (10 ft) thick, commonly occur in sheet-like, 1-2 m (3-6 ft) thick over bedrock and older pediment and alluvial fan gravels; clast content dominantly volcanic.

Qfp Older pediment gravel. Moderately to well-sorted, argillic developed and/or cemented horizon locally overlying siliceous and calcic duripan.

Qpt Alluvial fan deposits of Peavine Mountain. Yellowish-brown gravel and sand, silty, clay to clay large angular pebbles to small cobble-sized clasts of

[illegible]

bleached T.kf. Tkb: Hornblende-pyroxene dacite and andesite lahars, pyroclastic breccia, volcanic conglomerate, and sandstone with minor flows. T.ki: Intrusive hornblende-pyroxene-biotite T.kf: Flow-dome complexes of hornblende-biotite rhyodacite porphyry

Ta **Alta Formation.** Flows of dark fine-grained sanda trachyte; occurs in Steamboat Hills area


Kgd **Biotite-hornblende granodiorite**


pKm **Metasedimentary and metavolcanic rocks.** Graywacke, argillite, slate, phyllite, hornfels, metatuff and breccia, volcanic conglomerate, and marble

Contact. Dashed where approximately located; dotted where concealed

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
Fault. Dotted where approximately located; dashed where concealed; queried where presence uncertain

 **Undifferentiated landslides deposits**

 **Artificial fill.** Not all fill areas shown

12 ✓ **Strike and dip of beds**

40 ✓ **Strike and dip of flow layering**

 **Phreatic explosion fracture.** (Steamboat Hills)

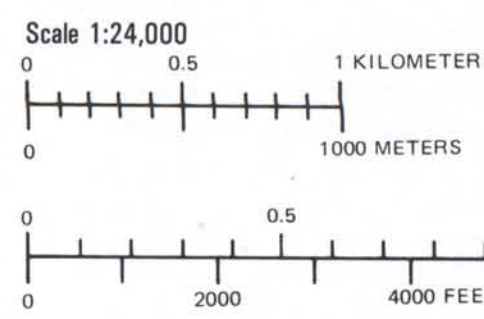
H. F. Bonham, Jr. and David K. Rogers, 1983

Supplementary mapping was provided by John W. Bell, E. C. Bingler, and Dennis T. Trexler. Geology of Steamboat Hills area modified from White and others (1964).

REFERENCES


Silberman, M. L., White, D. E., Keith, T. E. C., and Dockter, R. D. (1979) Duration of hydrothermal activity at Steamboat Springs, Nevada, from ages of spatially associated volcanic rocks: U.S. Geological Survey Professional Paper 458-D, 14 p.

White, D. E., Thompson, G. A., and Sandberg, C. H. (1984) Rocks, structure, and geologic history of Steamboat Springs thermal area, Washoe County, Nevada: U.S. Geological Survey Professional Paper 458-B, 62 p.



CONTOUR INTERVAL 20 FEET
DOTTED LINES ARE 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Topographic base from
U.S. Geological Survey
Mt. Rose NE 7 1/2' quadrangle, 1969
Cartography by Larry Jacox



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